

**BIG RIVER MINE
TAILINGS/ST. JOE
MINERALS
CORP.**

MISSOURI

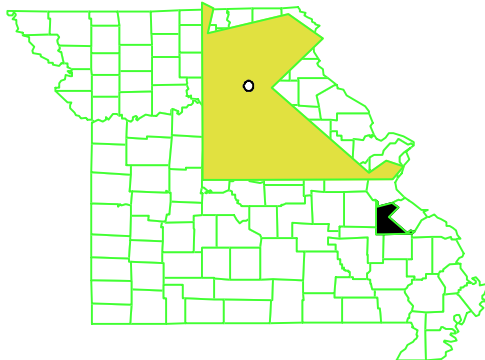
EPA ID# MOD981126899

EPA Region 7

City: Desloge

County: St. Francois County

Other Names:



SITE DESCRIPTION

The Big River Mine Tailings/St. Joe Minerals Corp. site is located in a former mining region known as the "Old Lead Belt", which is 70 miles south of St. Louis. This site is one of six large areas of mine waste in this rural region, approximately 110 square miles in size. From 1929 to 1958, mine tailings rich with lead, cadmium, and zinc were disposed over about 600 acres at the site which is bounded on three sides by the Big River. In 1977, heavy rains caused an estimated 50,000 cubic yards of tailings to slump into the Big River. The residual lead content in the tailings material is about one-half percent; other minerals such as cadmium and zinc are also present. The Missouri Department of Conservation has detected elevated lead levels in fish downstream of the mining area above World Health Organization Standards. The State of Missouri advises people fishing not to eat fish they catch from the Big River downstream of this area. The Big River is used for recreational purposes such as fishing, as well as for commercial activities such as watering livestock. Approximately 23,000 people reside within 4 miles of the site. Dust created by wind erosion contaminates the surrounding area and is a potential hazard to residents. A 1997 human health exposure study by the Missouri Department of Health (MDOH) shows that 17% of the children under seven years old have blood-lead concentrations exceeding the health-based standard of 10 microgram per deciliter.

Site Responsibility:

This site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 02/07/92

Final Date:	10/14/92
Deleted Date:	

THREATS AND CONTAMINANTS

Elevated levels of lead, cadmium, and zinc have been detected in the tailings pile. Surface water and various forms of biota in the Big River contain elevated concentrations of lead. Wind erosion and airborne dust have transported contaminants to the surrounding area and are a potential hazard to on-site workers, residents, and children. Fish in the Big River have shown elevated levels of lead. People on-site risk being exposed to contaminants in the dust and soil.

CLEANUP APPROACH

Response Action Status

Initial Actions: In 1995, the parties potentially responsible for site contamination began a non-time critical removal action to regrade the mine wastes at the site. The regrading will improve the structural stability of the pile thereby preventing sloughing into the river. Other activities at the site include covering and revegetating to control wind and weather erosion and providing rock slope protection at the waterline to prevent undercutting by the river.

Entire site: Besides this site, the other five major mine waste areas have been documented to have contaminant releases and will be controlled through non-time critical removal actions. The first step in a non-time critical removal action is to prepare an engineering evaluations/cost analyses (EE/CA). An EE/CA was completed for stabilization at the Federal Tailings Pile site in July 1996, another EE/CA was started in February 1997 for the Bonne Terre Mine Tailings site, an EE/CA for additional work at the Federal Mine Tailings site was started in September 1997, and another EE/CA was started in March 1998 for the National Tailings Pile. These actions and others will address the source releases from the mine waste areas. A focused remedial investigation and feasibility study (RI/FS) was started in January 1997 to evaluate the human health and ecological impacts on areas surrounding and between the mine wastes areas. It will require many years to carry out all the remedies. Until long-term remedial action is taken, a combined effort of federal, state, and local governments and the potentially responsible party will reduce the elevated blood levels in the areas of children. Action to reduce blood lead concentration will include lead-base paint controls, in home cleaning, education, and yard soil remediation. EPA will also evaluate the result of testing of daycare centers, public parks, and other common areas, and action will be taken to reduce the soil exposures, if needed. Prioritization of the actions takes into account actual threats and local concerns.

Site Facts:

Site Facts: An Administrative Order on Consent was signed in mid-1994 by the SFCEC and the Doe Run Resources Company, requiring them to conduct removal activities at the site. An Administrative Order on Consent was signed in early 1997 by the Doe Run Resources Company, requiring them to prepare an EE/CA for the Bonne Terre Mine Tailings. An Administrative Order on Consent was signed in early 1997 by the Doe Run Resources Company and ASARCO requiring them to conduct a focused remedial investigation/feasibility study for the surrounding main waste area. An Administrative Order on Consent was signed in March 1998 by the Doe Run Resources Company and NL Industries to complete an EE/CA for the National Tailings Pile. An Administrative Order on Consent was signed in September 1997 by the Doe Run Resources Company, ASARCO, and the state of Missouri to complete another EE/CA on the Federal Tailings pile. An AOC was signed in June 2000 by the Doe Run Resources Company to complete EE/CAs at the Elvins and Leadwood Tailings Piles. An AOC was signed in March 2000 by the Doe Run Company to conduct blood lead screenings and residential soil removal in the areas around the tailings piles.

ENVIRONMENTAL PROGRESS



Stabilizing the Desloge tailings pile has reduced the potential for exposure to site contaminants at the Big River Mine Tailings/St. Joe Minerals Corp. site while further initial actions and investigations are underway for the remaining mine piles and surrounding communities.

SITE REPOSITORY



Desloge Public Library, 209 N. Desloge Drive, Desloge, MO 50613
Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-4038

REGIONAL CONTACTS

SITE MANAGER:

Bruce Morrison

E-MAIL ADDRESS:

morrison.bruce@epamail.epa.gov
(913) 551-7755

COMMUNITY INVOLVEMENT

Hattie Thomas

COORDINATOR:

PHONE NUMBER:

(913) 551-7762

PUBLIC INFORMATION CENTER:

E-MAIL ADDRESS:

STATE CONTACT:

Robert Hinkson

PHONE NUMBER:

(573) 751-0634

MISCELLANEOUS INFORMATION

STATE:

MO
07CR

CONGRESSIONAL DISTRICT:

08

EPA ORGANIZATION:

SFD-SUPR/FFSE

MODIFICATIONS